101-1 Preliminary Syllabus, Da-Yeh Univ

Information			
Title	普通生物學(一)	Serial No. / ID	0427 / BTI1013
Dept.	生物產業科技學系	School System / Class	大學日間部1年2班
Lecturer	洪淑嫻	Full or Part-time	專任
Required / Credit	Required / 3	Graduate Class	No
Time / Place	(四)1 / H562 (四)56 / H562	Language	Chinese

Introduction

Organisms have evolved from simple to complex, from low to moderate to high in the long process. Organisms have developed in varied structure and function depending on their living environment is closely linked in the long-term natural selection. The developments of evolution, structure and function of organisms have been compatible with their environment. General biology is to study the biological life activities and the principles by science, including life characteristics, metabolism, growth and development, genetic variation, etc., which covering a very wide range of knowledge, involving the interesting fields. The structure and functions of molecules, nutrition, energy and metabolism in-depth content will be lectured in cell biology, biochemistry, molecular biology, genetics and other follow-up course for more detailed. This course focuses on the essential chemistry for biology, the molecules of life, a tour of the cell, the working cell, cellular respiration, photosynthesis, cellular reproduction, cellular reproduction, the structure and function of DNA, how gene are controlled, and DNA technology. Objective of this course is to develop the professional knowledge base for students in biology, to inspire students enthusiasm study and interest in biology, to explain the different levels of life and ecological relationships, and to establish the basis of other disciplines.

Outline

- 1.Introduction: Biology Today (I)
- 2.Introduction: Biology Today (II)
- 3. Essential Chemistry for Biology (I)
- 4. Essential Chemistry for Biology (II)
- 5.Off-campus teaching
- 6. The Molecules of Life (I)
- 7. The Molecules of Life (II)
- 8.A Tour of the Cell
- 9.Midterm
- 10. The Working Cell
- 11. Cellular Respiration: Obtaining Energy from Food
- 12.Off-campus teaching
- 13. Photosynthesis: Using Light to Make Food
- 14. Cellular Reproduction: Cells from Cells
- 15.Patterns of Inheritance
- 16. The Structure and Function of DNA
- 17. How Gene Are controlled

18.DNA Technology

Prerequisite

No